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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/010,193 | 12/06/2001 | Hideki Tsuchida | 51334 | 2589 |

7590 03/03/2003

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EXAMINER

KRUER, KEVIN R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 03/03/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|-----------------|-----------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/010,193 | TSUCHIDA ET AL. | |
| | Examiner | Art Unit | |
| | Kevin R Krueer | 1773 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____ .
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____ .
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Objections

1. Claims 4-6 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiply dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-6 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "metal element" in claim 1 is used by the claim to mean "a metal or metal compound," while the accepted meaning is "a ^{of an "element"} substance which cannot be further divided by chemical methods."

Claim 1 states, "which is obtained..." in line 2 of the claim. It is unclear what is obtained by using a resin base treated with ion exchange group introduction agent. The "resin composite material?" The "resin base?"

The claim further states "and treating its surface with a liquid containing metal ions to introduce metal ions." It is not clear to what object "its" refers.

The claim also states, "and then converting said metal ions." But it is not clear to what the metal ions are converted. Must the metal ions be converted to the "metal element?"

Claim 1 recites the limitation "said non-charging resin composite material" in line 4. There is insufficient antecedent basis for this limitation in the claim.

The parenthetical reference in the last line of claim 1 is indefinite because it is not clear if the claim must meet the limitations within said parenthesis.

Furthermore, claim 1 recites "the ratio of the surface resistivity of said resin composite material to the resistivity of said component containing metal element..." However, the claim fails to state a ratio.

Claim 1 recites the limitation "said resin composite material" in line 6. There is insufficient antecedent basis for this limitation in the claim.

In claims 1 and 2, the units of the claimed resistivities are indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn et al (US 3,642,584). Quinn teaches a plastic substrate that is plated with a metal by pretreating the substrate with phosphorous sesquisulfide (herein relied upon to read on the claimed "ion exchange group introduction agent") in an organic solvent to

deposit phosphorus sesquisulfide at the surface, followed by contacting the treated surface with a metal salt or complex thereof, to form a metal-phosphorus-sulfur compound and then with a solution of an alkali metal hydroxide or carbonate or ammonium hydroxide or a non-oxidizing mineral acid (abstract). The resulting treated surface is conductive (abstract). NOTE: With respect to claim 3, the "metal element" in Quinn is metal.

Quinn teaches that the layer may be conductive, but does not teach the desired level of conductivity on the surface. However, it would have been obvious to one of ordinary skill in the art to select the metal element and to vary the amount of metal element deposited on the substrate in order to obtain the desired level of conductivity. The examiner takes the position that one would necessarily change the "ratio of the resin composite material to the resistivity of said component containing metal element" with the selection of the metal element and by varying the amount of metal element deposited.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 703-305-0025. The examiner can normally be reached on Monday-Friday from 7:00a.m. to 4:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone

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number for the organization where this application or proceeding is assigned is 703-305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

K-271-
krk

Paul Thibodeau
Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700